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INDIVIDUALS FOR CASUAL  
COLLABORATIVE CONFERENCING****Publication Classification**(76) Inventor: **Craig Alexander Will, Fremont, CA  
(US)**(51) Int. Cl.<sup>7</sup> ..... **H04M 11/10; H04Q 7/20**(52) U.S. Cl. .... **455/413; 455/428**Correspondence Address:  
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DALLAS, TX 75380 (US)**(57) **ABSTRACT**

A method for real-time communication among two or more individuals separated in space. The method includes the steps of determining that a first individual is likely to be interested in communicating with a second individual via a first communications link; retrieving information via the first communications link about one or more additional individuals from electronic memory means associated with the second individual; and establishing communication with at least one of the additional individuals based on the retrieved information.

(21) Appl. No.: **10**

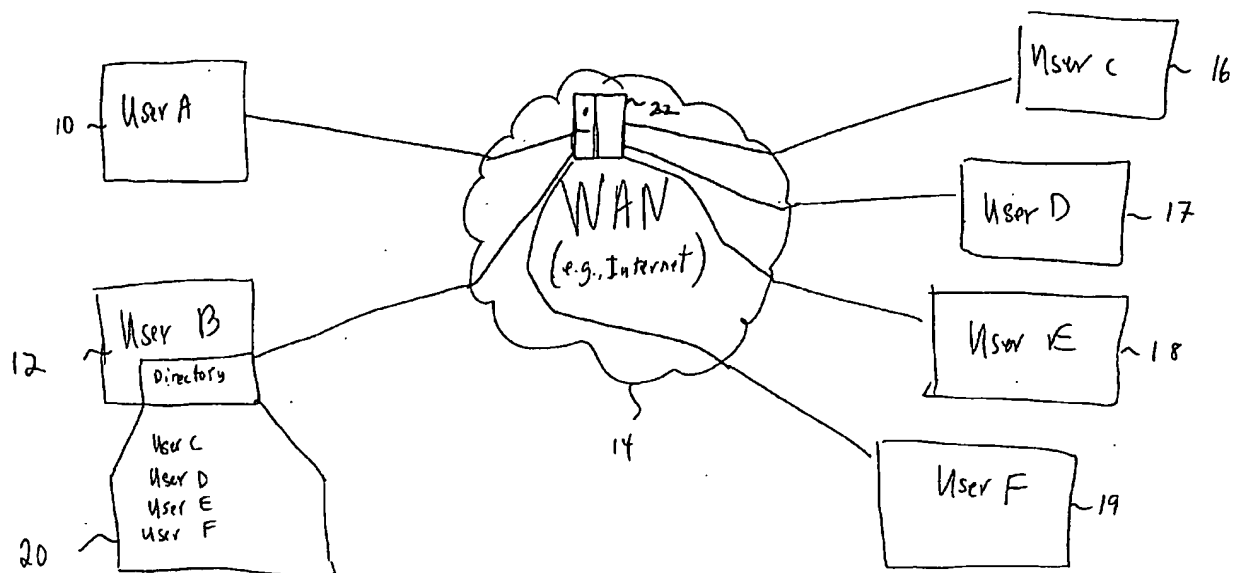
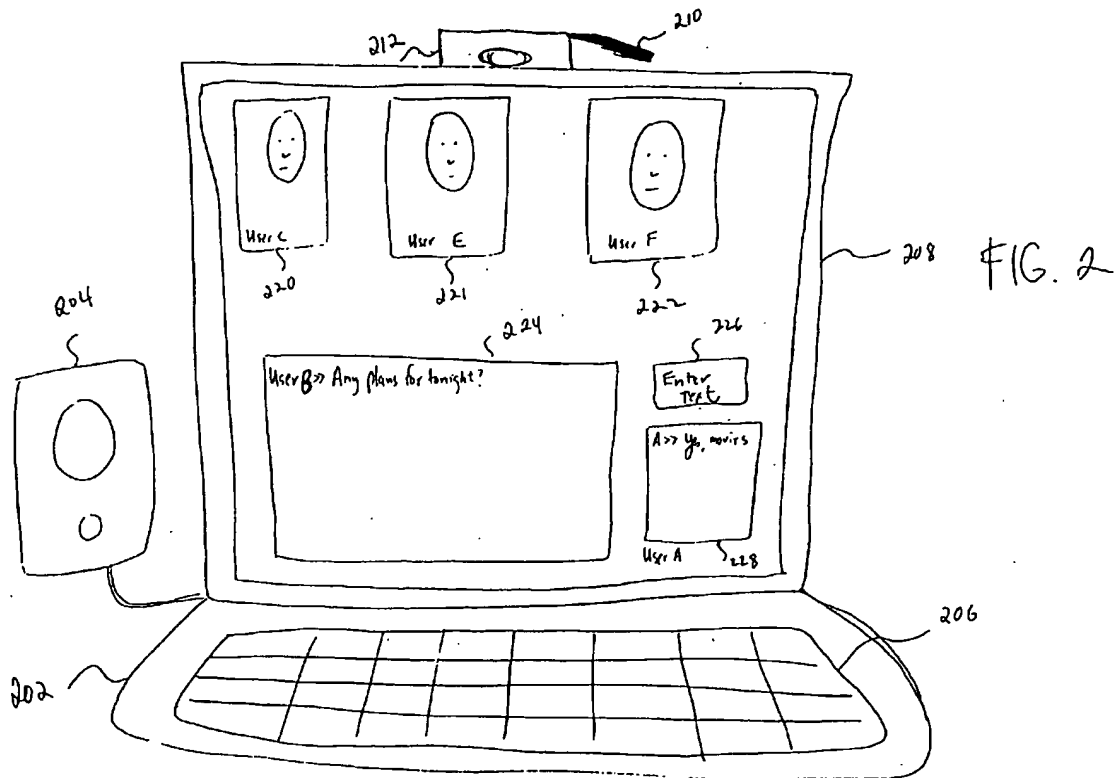


FIG. 1

100



User B's Personal Directory	
300 ~	User C - Public - chat, A, D - videoconference
301 ~	User D - A, C
302 ~	User E - Public
303 ~	User F - A, D - videoconference
304 ~	User G - Not Accessible, only B

FIG. 3

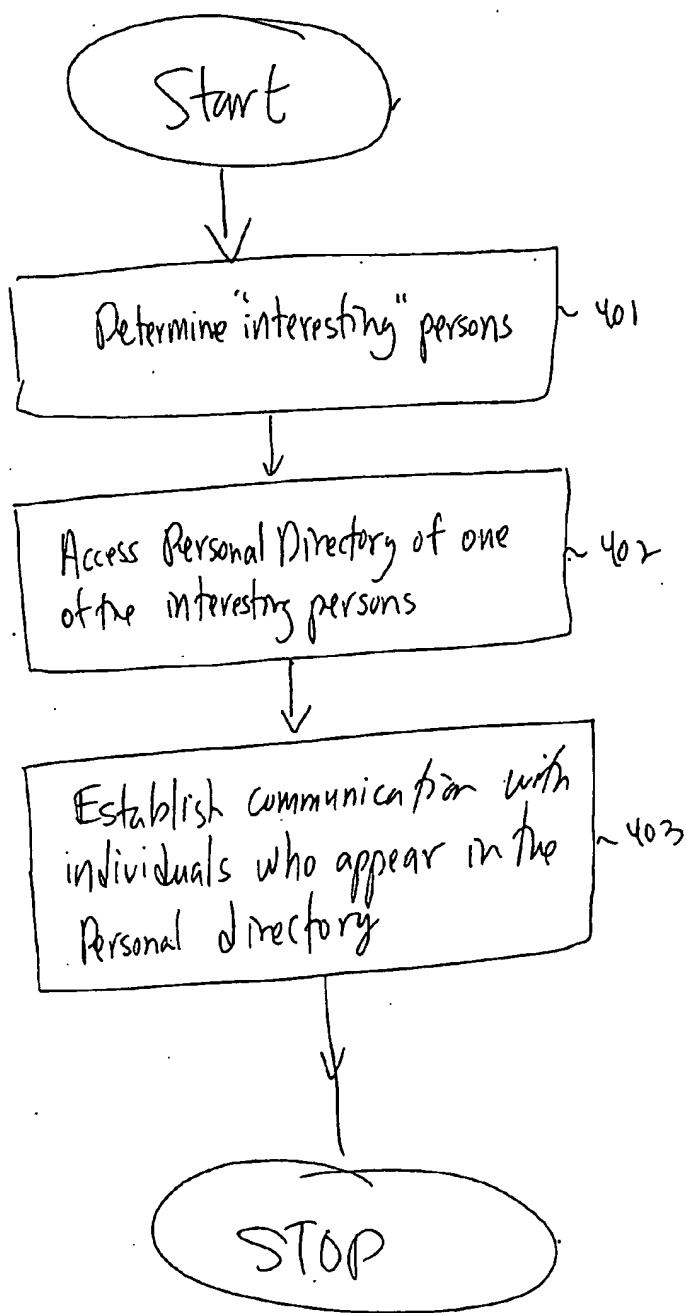


FIG. 4

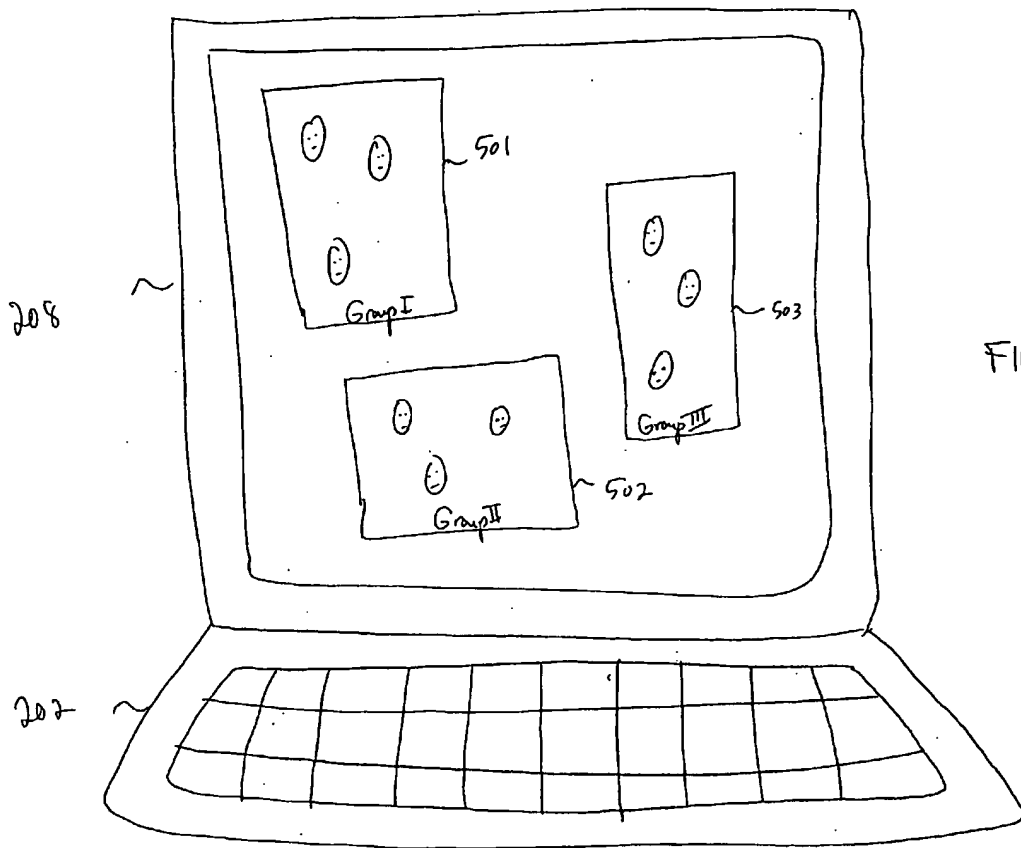


FIG 5.







[0033] Other levels of permissions include, but are not limited to, giving the public access to the entire directory 20, giving specific persons access to the entire directory 20, giving the public access to information contained in some of the records 300-304, and giving specific persons access to information contained in some of the records 300-304.

[0034] The directory 20 can be created by user B manually. That is, user B can gather a list of names of individuals that he or she communicates with, and enters that list into the directory 20. In the present invention, an alternative to manually creating the directory is to have the software that enables collaborative conferencing create the directory 20 for the user. The software has a routine that monitors the communication between user B and other users (e.g., C-F) and that adds to the directory 20 information about the users that communicate with user B. As an option, the software can sort the information in the directory 20, according to the frequency of the communications between user B and the individuals named in the directory 20. Moreover, another option consists of automatically deleting information from the directory 20, when the software determines that persons that do not communicate frequently with user B, have not actually communicated with user B for specified period of time. For example, the software could look at the sorted directory 20, and determine whether the individual whose information is at the bottom of the directory (less frequency) has communicated with user B in the past two months. If the person at the bottom has not done so, that person's information is deleted from the directory 20. The period of two months is only an example of a parameter that can be adjusted according to the directory's owner preferences.

[0035] FIG. 2 shows communication means 10 for enabling communication between user A and other users (e.g., users B-F) of the system 100, and that corresponds to user A in this particular example. The communication means 10 includes a computer system 202 with a keyboard 206 and a screen 208; and a speaker 204, camera 212, and microphone 210 connected to the computer 202. The computer 202 runs software that displays on screen 208 a representation of other users 220-222 present (on-line) in a virtual space room. The ability of communicating with these other parties in real-time via the computer system 202 is what makes the system a collaborative conferencing system.

[0036] The computer 202 only displays an image of those users that have been determined to be of interest to user A 10. As seen on FIG. 2, user A has determined that he or she is likely to be interested in communicating with users C, E and F. The representation of users C, E and F in the computer screen is denominated by numerals 220-222, and it includes image information as well as other personal information about the users. User A uses different means to communicate with any of the users in the virtual space room. These means include, but are not limited to, voice, interactive text (chat), e-mail, and video.

[0037] The speaker 204 is used for listening to voice messages sent by the users in the virtual space room. On the other hand, the microphone 210 is used to send voice messages to users in the virtual space room. These voice messages are either voice mail messages, stored either locally in the computer 202 or in some other recording means, or real-time voice messages (i.e., real-time telephony).

[0038] The camera 212 is used to capture an image of user A, which is presumably displayed in the computer screen associated with other users participating in the virtual space room. The camera 212 is turned off when user A does not desire to transmit an image of herself/himself. It is possible to have a participant in the virtual space room that does not want his or her image displayed. For example, a chat window 224 displays interactive text communications between user B and user A. As seen from the display, an image of user B is not shown in the screen 208. The chat window 224 is used by any of the users in the virtual space room, and its use is limited to displaying text messages from all of the parties, as it would for a conventional chat room.

[0039] When user A decides to communicate via interactive text, he or she needs to type the message on the keyboard 206. The user can edit the entered text which is displayed on the window 228. After the changes have been entered, the text is displayed on the chat window 224 when user A hits the button 226 displayed on the screen 208.

[0040] By comparing FIG. 2 and FIG. 3, one notices that the image representations 220-222 displayed on screen 208 of user A's computer system 202 match the permissions associated to users C, E and F (300, 302 and 303 in FIG. 3). As discussed above, user A has determined that user B is likely to be an interesting person. This is evidenced by the interactive text exchange between user A and user B, shown in windows 224 and 228 of FIG. 2. It is also evident from FIG. 2, that user A could have accessed the directory 20 in order to access information about users C, E and F. Thus, user A determined that users C, E and F are also likely to be interesting. User A could have also determined that user D is likely to be an interesting person, even though user D is not displayed on screen 208. Only users that are on-line are displayed on the screen 208.

[0041] FIG. 4 shows a method for performing collaborative conferencing in accordance with the present invention. In step 401 a first user determines which persons are likely to be interesting. As discussed previously, this determination can be done for a single person, and then the determination of additional persons likely to be interesting can be expanded by looking at the directory of the first persons determined to be likely interesting. In step 402, the first user accesses the personal directory of one of the likely interesting persons. This step is not limited to the first person that was determined to be likely interesting. Once a list of likely interesting persons have been put together by the first user, he or she can go into the directory of any of the individuals in

is in the other groups. If user A wants to communicate with individuals from the other groups, user A must change groups in order to accomplish the desired communication. For example, if user A is in Group I 501, and notices that user B (a person that is likely to be interesting) is in Group II 502, user A would have to enter Group II 502 in order to communicate with user B. Once user A transfers to Group II 502, an image representation of user A would appear in the area of the computer screen that corresponds to Group II 502.

[0044] The foregoing description of preferred embodiments of the present invention provides illustration and description, but is not intended to be exhaustive or to limit the invention to the precise form disclosed. Modifications and variations are possible in light of the above teachings or may be acquired from practice of the invention. The scope of the invention is defined by the claims and their equivalents.

What is claimed is:

1. A method for real-time communication among two or more individuals separated in space, comprising the steps of:

determining that a first individual is likely to be interested in communicating with a second individual via a first communications link;

retrieving information via the first communications link about one or more additional individuals from electronic memory means associated with the second individual; and

establishing communication with at least one of the additional individuals based on the retrieved information.

2. The method of claim 1, wherein the step of determining that a first individual is likely to be interested in communicating with a second individual via a first communications link comprises the step of:

establishing communication between the first individual and the second individual.

3. The method of claim 2, wherein the communication established between the first and second individuals is carried out by telephony.

4. The method of claim 3, wherein the communication established between the first and second individuals is by real-time telephony.

5. The method of claim 2, wherein the communication established between the first and second individuals comprises exchanges of voice mail messages.

6. The method of claim 2, wherein the communication established between the first and second individuals comprises exchanges of text messages.

7. The method of claim 2, wherein the first and second individuals communicate via real-time video.

8. The method of claim 2, wherein the first and second individuals communicate via interactive real-time text communication.

9. The method of claim 1, wherein the step of determining that a first individual is likely to be interested in communicating with a second individual comprises the steps of:

displaying a representation associated with the second individual to the first individual; and

selecting the representation by the first individual.

10. The method of claim 1, wherein the information retrieved from electronic memory means associated with the second individual is organized in a personal directory included in the electronic means.

11. The method of claim 10 wherein the information about one or more individuals in the personal directory is entered manually by the second individual.

12. The method of claim 1, wherein the information in the memory is obtained by observing previous communications between the second individual and one of the individuals in the memory.

13. The method of claim 12 wherein the information is organized in a personal directory included in the electronic memory.

14. The method of claim 12, wherein the communication established between the second individual and one of the individuals in the memory is carried out by telephony.

15. The method of claim 12, wherein the communication established between the second individual and one of the individuals in the memory is by real-time telephony.

16. The method of claim 12, wherein the communication established between the second individual and one of the individuals in the memory comprises exchanges of voice messages.

17. The method of claim 12, wherein the communication established between the second individual and one of the individuals in the memory comprises exchanges of text messages.

18. The method of claim 12, wherein the second individual and one of the individuals in the memory is by real-time video.

19. The method of claim 12, wherein the communication established between the second individual and one of the individuals in the memory communicate via interactive real-time text.

27. The method of claim 22, wherein the permissions set for a given directory vary according to a mode of use in a collaborative conferencing session.

28. The method of claim 13, wherein the second individual sets permissions associated to the access of the personal directory by others.

29. The method of claim 28, wherein the permissions set allow the personal directory associated with the second individual to be accessed by the public.

30. The method of claim 28, wherein the permissions set allow the personal directory associated with the second individual to be accessed by specific persons or group of persons designated by the second individual.

31. The method of claim 28, wherein the permissions set make public a plurality of individual records, each record containing information corresponding to each of the at least one individuals.

32. The method of claim 28, wherein the permissions set make available, to specific persons or group of persons, a plurality of individual records, each record containing information corresponding to each of the at least one individuals.

33. The method of claim 28, wherein the permissions set for a given directory vary according to a mode of use in a collaborative conferencing session.

34. A collaborative conferencing system comprising:

a large virtual space room;

a display for displaying in real-time a representation of only those persons in the virtual space room who have been defined as likely to be interesting; and

means for establishing communications with the persons in the virtual space room.

35. The system of claim 34, wherein the representation of persons includes information about the persons.

36. The system of claim 34, wherein the collaborative conferencing system is set to a mode of random casual conferencing, the random mode enabling the communication between two persons that seek an interesting but otherwise random conversation.

37. The method of claim 36, wherein the communication comprises two-way audio conferencing.

38. The method of claim 36, wherein the communication comprises two-way interactive text communication.

39. The method of claim 36, wherein the communication comprises email exchange between the two persons.

40. The method of claim 36, wherein the communication comprises voice mail message exchanges between the persons.

41. A collaborative conferencing system comprising:

a large virtual space room comprised of persons from the general public or from private groups or organizations;  
a display for displaying in real-time a representation of persons from the virtual space room; and

means for establishing communications with the persons in the virtual space room.

42. The system of claim 41, wherein the communications can be established via text conferencing or via audio conferencing.

43. The system of claim 42, wherein the group of persons that form the virtual room are partitioned into subgroups.

44. The system of claim 43, wherein persons in a subgroup only communicate with persons within that subgroup.

45. The system of claim 44, wherein a person in a subgroup can transfer to another subgroup after looking at the existence of other subgroups in the display and determining another subgroup of interest.

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